



DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF WATER RESOURCES

901 S. Stewart Street, Suite 2002
Carson City, Nevada 89701
(775) 684-2800 • Fax (775) 684-2811
<http://water.nv.gov>

Re: J-637 (NV00050)

January 7, 2010

Vernon Dalton
Metropolis Water Irrigation District
HC 60 Box 125
Wells, Nevada 89835

Dear Mr. Dalton:

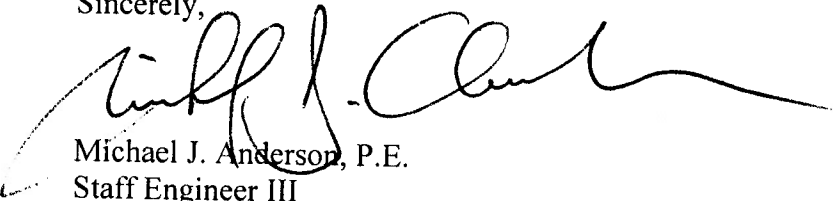
Please find enclosed approved application J-637 for the construction of the described facility with supporting documents bearing the endorsement of the State Engineer. Please review attachment "A" of the authorization for due dates and "as-built" submittal items. Please also take particular note of terms (4), (5) & (7) of attachment "A."

A revised Emergency Action Plan will be required in order to gain an approval to impound.

You are responsible for maintaining a safe work site during construction. Please report any slumps, sloughs, seeps or unusual observations to the State Engineer immediately.

If you have any questions, please feel free to call the undersigned at (775) 684-2843.

Sincerely,


Michael J. Anderson, P.E.
Staff Engineer III

MJA/sg

Enclosure

cc: Dan L. Dyer, P.E., Dyer Engineering and Consultants, Inc.
Michelle Stamates, P.E., NDEP Bureau of Administrative Services

RECEIVED

JAN 11 2010

ENVIRONMENTAL PROTECTION

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION WATER RESOURCES

Application No. J-637

Filed May 9, 2009
J-637

APPLICANT MUST NOT FILL IN ABOVE BLANKS

APPLICATION FOR APPROVAL OF THE PLANS AND SPECIFICATIONS FOR
THE CONSTRUCTION, RECONSTRUCTION OR ALTERATION OF A DAM

This Application Involves in No Way the Right to Appropriate Water
To secure the right to appropriate water, application should be made to the State Engineer
on forms which will be furnished upon request.

I, D. Vernon Dalton of HC 60 Box 130
Wells, NV 89835, hereby make application for the approval of the

Plans and specification of the Reconstruction of Bishop Creek Dam dam.
Construction, reconstruction, alteration Name of dam

The owner of the proposed dam is Metropolis Water Irrigation District
of HC 60 Box 125 Wells, NV 89835 State of Nevada
Name of owner Address

If the owner is a corporation, give name and address of president and secretary --

N/A

The applicant is acting for the owner in the legal capacity of Project Director for District
Agent, Lessee, Trustee, etc.

Location of Dam

1. The source of water to be stored is Bishop Creek which is a tributary of Humboldt River
Name of stream or underground Stream
and the proposed dam to be located within the NE 1/4, NW 1/4, Sec. 24
T. 39N, R. 62E, M.D.B.&M. in ELKO County, Nevada.

Description and Dimensions of Dam

(If for an alteration, the data given below is for the altered dam)

2. Type of dam Earth Fill 3. Length of crest 408 ft.
Concrete arch or gravity, earth, rockfill, etc.
4. Height stream bed to spillway crest 77 ft. 5. Height foundation to spillway crest 125 ft.
6. Freeboard 17 ft. 7. Thickness at top 25 ft. 8. Thickness at bottom 400 ft.
Spillway crest to top
9. Slope upstream* 3:1 10. Slope downstream* 2:1 11. Upstream facing Riprap
This information to be supplied for earth or rockfill dams Concrete or rock paving, etc.
12. Amount of material in dam 202,000 cu. yds. 13. Estimated Cost \$ \$7,500,000
Approximate
14. Spillway data open channel concrete chute with flipbucket.
Type, Capacity, etc.
15. Outlet data 36" Ø RCP
Type, capacity, etc.
16. Elevation of crest of dam 5940' above MSL datum
Approximate elevation to be given if true elevation not available
17. Area of reservoir at spill way level 706 acres. 18. Capacity of reservoir 15,100 ac. ft.

\$500 filing fee must accompany this application

General Information

19. State the purpose of the dam Irrigation water storage
Diversion only; storage only; storage and diversion; debris storage, flood control, etc.
20. State the use that is to be made of water Irrigation and Recreational
municipal, domestic, irrigation, power, mining and milling, recreation, stockwatering or none
21. Engineers Dyer Engineering Consultants, Inc.
Name and address of Engineers preparing plans
5442 Langley Lane Ste A,
Reno, NV 89511 (775) 852-1440

22. If the proposed dam is to be built under Federal supervision, state what department has jurisdiction

N/A

23. The maps, plans and specifications accompanying this application are a part thereof.

[Signed]

D. Vernon Smith
Applicant

this 27 day of MAY, 2007

APPROVAL OF APPLICATION NO J-637, INCLUDING
PLANS AND SPECIFICATIONS

This Is to Certify That Application No. J-637, including plans and specifications
for the BISHOP CREEK (METROPOLIS) dam
has been examined and the same is hereby approved, subject to the following conditions:

PLEASE SEE ATTACHMENT "A"

Witness my hand and seal this 7th day

of January, 2010

T. J. Smith P.E.
State Engineer

ATTACHMENT "A"
Permit terms for the construction of Bishop Creek (Metropolis) Dam.

- 1) This approval includes the construction of the Diversion Structure, but not those items described as the Conveyance System, Access Road and Recreation Facility, except as provided for in item (2), following.
- 2) Plans and specifications for the extension of the access road to the dam site (Construction Specifications – Binder 2, page 25 of 352) must be submitted for review and approval by the State Engineer no less than thirty (30) days prior to initiating construction of said extension.
- 3) Addition of a hydropower facility at the dam will require a separate Application for Approval of Plans and Specifications by the State Engineer.
- 4) This approval is contingent upon approval of Applications 78911 and 78912 currently before the State Engineer to change water Permits 1000 and 1807, Certificate 2850.
- 5) If construction has not commenced within two (2) years of this approval, the permit will become void and a new application must be made prior to initiating construction.
- 6) A Nevada licensed civil engineer experienced in dam construction shall make periodic inspections during construction to ensure conformance to the approved plans and specifications.
- 7) The State Engineer must be notified upon completion of foundation excavation, characterized as Phase A, such that an inspection may be performed. No fill or crack treatment other than cleaning may be performed until the inspection has been completed. Should foundation grouting be scheduled prior to foundation excavation, the State Engineer must also be notified prior to initiating grout placement.
- 8) Change orders or other modifications to the design, plans or specifications for either the diversion or storage dam must be submitted to the State Engineer as they are determined.
- 9) Upon completion of construction but no later than January 9, 2012, the engineer shall submit to the State Engineer a Report of Completion of Work (Report). If the Diversion Structure is constructed as a separate phase, a separate Report must be submitted upon completion of the Diversion Structure.
- 10) The Report must include the statutory filing fee, signed verification from the engineer that the structure was completed in substantial conformance to the plans and specifications as approved and record drawings ("As-Built"). The Report shall further include:
 - a. A summary of the results of all earth compaction, concrete strength and any other tests. Actions taken in response to any failed tests shall be described.
 - b. The moisture density relationships, vibratory compaction, etc. (lab results) for all soils utilized.
 - c. Foundation grouting results to include, without limit: hole locations and inclinations, hole deviation, test results, grout pressure and take by interval, grout mix and observations of overseeing engineer.
 - d. Seep analysis for improved foundation with the water surface at normal maximum conservation with respect to expected water volume at drains.

e. Description of borrow source(s) for any imported embankment materials

- 11) The record drawings must also include an accurate reference point located on the embankment, preferably at benchmark 3, and a delineation of the actual borrow sources. The reference point must be tied to a found section corner by bearing and distance and be described by latitude and longitude.
- 12) The request for approval to impound must be accompanied by an updated Emergency Action Plan (EAP) reflecting the modified storage and diversion dams.
- 13) The request for approval to impound must be accompanied by an Operations and Maintenance (O&M) Manual(s) covering all facets of both the diversion and storage dams.
- 14) Upon satisfactory review of the Report, the State Engineer will issue an Approval to Impound. Water may not be impounded behind the structure prior to receipt of the Approval to Impound.
- 15) Property improvements that increase the upstream runoff conditions may necessitate modification of the structure to meet a larger extreme event flow. The owner is responsible for submitting revised inflow flood studies, making any required modifications and acquiring the necessary permit(s).
- 16) This office, its officials or employees assume no liability for the information, data or conclusions presented by the consulting engineer. Therefore no warranty, either expressed or implied, has been made in conduct of this review.
- 17) This approval does not waive the necessity of obtaining other required permits from any applicable Federal, State or local agencies.